BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Other advantages of the present invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

[0010] Figure 1 is a perspective view of a vehicle incorporating a sensing device according to the subject invention;

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[0011] Figures 2A-2C ARE A schematic block diagram of the sensing device;

[0012] Figure 3a is a cross-sectional view of a glazing, illustrating the piezoelectric sensor disposed between a first glazing pane and a second glazing pane; and

[0013] Figure 3b is a cross-sectional view of the glazing, showing the sensing device attached to the glazing.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0014] Referring to the Figures, wherein like numerals indicate like or corresponding parts throughout the several views, a sensing device is generally shown at **10**. The sensing device **10** of the subject invention includes the ability to determine a rain rate of rain striking a surface **26**.

[0015] Referring to Figure 1, the vehicle **12** includes a vehicle glazing **14** and at least one wiper blade **16**. Preferably, as disclosed in Figure 1, two wiper blades **16** are utilized. The wiper blades **16** move across the glazing **14** to remove raindrops from the glazing **14**. Those skilled in the art appreciate that the glazing **14**

of a vehicle may include, but is not limited to, a windshield, a back window, or a side window of a vehicle.

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[0016] Referring now to Figure 2, at least one motor **18** is operatively connected to the wiper blades **16** for moving the wiper blades **16** across the glazing **14**. Preferably, only one motor **18** is needed for the two wiper blades **16**. At least one switch **20** is operatively connected to the motor **18** for activating the motor **18**. Preferably, only one switch **20** is necessary for the one motor **18**. However, it is to be understood, that the wiper blades **16**, motor **18**, and switch **20** can be configured differently without varying the scope of the subject invention.

[0017] A controller **22** is operatively connected to the switch **20**. The controller **22** activates the switch **20**, which in turn activates the motor **18**, which then causes the wiper blades **16** to move across the glazing **14** and remove the raindrops from the glazing **14**.

[0018] The sensing device includes a piezoelectric sensor **24**. Referring again to Figure 1, the piezoelectric sensor is mounted to a surface **26** of the vehicle **12**. It is preferred that the piezoelectric sensor **24** is mounted to the glazing **14**, therefore described below only in terms of the glazing **14** being the surface **26**. However, it is to be understood that in alternative embodiments, the piezoelectric sensor **24** can be mounted to a roof **30**, or hood **32** of the vehicle, etc. It is to be understood that different vibration characteristics of the vehicle **12** occur at different locations on the vehicle **12**. Hence, additional provisions, such as filtering or absorption, may be necessary depending on a mounting location for and properties of the piezoelectric sensor **24**. It is preferred that the piezoelectric sensor **12** is mounted